

## Virtual Learning

Differences between one-foot and two-foot jumping

# Biomechanics of Sports

5/4/2020



Lesson: 5/4/2020

## Objective/Learning Target:

1. The student will learn about the differences between one-foot and two-foot jumping

## Differences in Jumping

Overall jump and reach heights are similar between one-foot and two-foot jumps, the strategies employed to achieve these results are notably different.

Note: The strategy to achieve great distance in triple jump requires one foot jumping technique.



## One foot jumping

One-foot jumps benefit from an increased takeoff height that is largely attributable to the elevation of the free swinging leg.



# Application of one-foot jumping



## Two foot jumping

Greater flight heights are achieved during two-foot jumps.



# Application of two-foot jumping



# Factors between one-foot and two-foot jumping

It is well researched that two foot jumping creates higher flight height but only due to factors of each individual with the development of their muscular tension, vertical velocity at landing, and horizontal approach speed.